

WHAT IS CLAIMED IS:

1. A liquid chromatography separation system that has properties, comprising:
at least two or more individual systems, each of said systems having a mobile phase and a column and controlling independently the mobile phase that flows through the column;
a plurality of trapping columns for trapping analytes of the mobile phase that are eluted from the column;
a mechanism for selecting either loading the analytes eluted from the column onto said trapping columns, or diverting the mobile phase to waste; and
a mechanism for eluting the analytes trapped on each trapping column and for online loading onto a second analytical column.
2. The liquid chromatography system according to claim 1, further comprising a system for detection of separated analytes eluted from the second column or a last column if there is a series of more than two systems with more than two columns.
3. The liquid chromatography system according to claim 1, further comprising a system for detection of separated analytes eluted from the column or an intermediate column if there are more than two independent systems and columns.
4. The liquid chromatography system according to claim 1, 2 or 3, further comprising a system for desalting that is set up independently from any other systems, the desalting being performed after trapping the analytes on each trapping column and before loading onto the next column, and a solvent for desalting being different from those of any other mobile phase.